

REMARKS

Claims 1-9, 11 and 12 now stand in the application, the claim 1 having been amended to incorporate the limitations of claim 10 and in the alternative claims 4 or 5. Reconsideration of the application and allowance of all claims are respectfully requested in view of the above amendments and the following remarks.

The prior art rejections stated in paragraphs 3-10 of the Office action are respectfully traversed for the reasons discussed below.

The present invention relates to an abrasion resistant jacket for a flexible cable. In the embodiment of Fig. 1, the jacket comprises an extruded plastic layer 2 surrounding the core 1, an outer plastic jacket 4, and between these two plastic layers a layer 3 of a plurality of monofilaments. The layer 3 has a visual coverage of 40% to 70%, and the outer plastic layer 4 is formed by pressure extrusion such that the material of the plastic layer fills to some significant extent the spaces in the layer 3. In the embodiment of Fig. 2, an additional electric shield layer 5 and surrounding plastic foil 6 are disposed between the core 2 and monofilament braid layer 3.

Smith (EP 0 790 624) discloses a strength member array 18 disposed about a first jacket 16. A second jacket 20 is disposed about the strength member array. An object of Smith is to improve a signal transmission cable by making it resistant to failure in dynamic load applications. A further purpose of Smith is to provide an improved fibrous strength member for maximizing the mechanical performance of a signal cable assembly. Yet another purpose of Smith is to provide an improved signal cable which minimizes load and strain transfer between the cable core and the strength member.

The strength member array 18 in Smith includes at least one strength member 21 which is shown in Fig. 2 as being formed of a plurality of filaments 22 and a surrounding layer 24 of a low friction material. Smith is not trying to provide an **abrasion resistant** sheath, but with a **flexible** sheath which will increase the longevity of the cable sheath when subjected to cyclic, flex and dynamic loading. Smith's strength members with a plurality of filaments would not improve the abrasion resistance because in the case of a radial load the multiple small filaments would tend to get out of way of the load. See, e.g., lines 19-41 of column 7 where Smith describes that impregnation of the filament bundle reduces the negative effects of point loading, while allowing the filaments to move and providing for load sharing between overlapping strength members at the points of contact.

The invention defined in the present claims differs from the structure and concept of Smith, and limitations from certain of the dependent claims have been added to claim 1 to emphasize the distinctive nature of the invention. The strength members in the layer (3) are claimed as monofilament elements having diameters in the range of 0.15 to 0.25 mm, as opposed to the members in Smith which are not monofilament but are made up of fibrous elements which would be of much smaller diameter.

With respect to Andrien, that reference teaches the use of a woven fabric of monofilament warps and strands of bulky multifilament yarn 11. The diameter of monofilaments is given as about 8 to 15 mils, which translates to about 0.2 to 0.38 mm. But the structure of Andrien is for bundling items, and it is not contemplated to have this structure covered with a pressure-extruded plastic that substantially files the spaces in the woven sleeve. One of ordinary

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skill in the art on reading the two references would not be led to replace the fibrous strength members 21 with the monofilaments of Andrien, at least for the reason that there is a specific purpose in Smith for using the fibrous members (i.e., load dispersion as discussed above), and this purpose would be defeated by replacing the fibrous members with monofilaments. It is also not at all clear that the sleeve of Andrien would serve its purpose if impregnated with plastic. Thus, it is submitted that the obviousness to combine the teachings in the particular manner proposed by the examiner only occurs through hindsight after reading the present application.

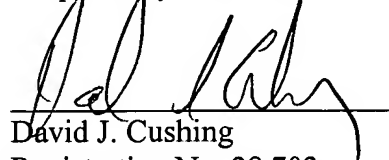
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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